

IN THE SPECIFICATION

Following is a marked-up version of each amended paragraph of the subject patent application. The Examiner is requested to delete the indicated paragraph and replace it with the amended paragraph.

Replace paragraph [0015] with the following.

[0015] In both the clamped and electrostatic chucks, embedded heaters heat the chuck to a predetermined temperature (e.g., about 300° C) to maintain a desired wafer temperature. In both chuck types, a gas (usually argon) flows behind the wafer 106 to thermally couple the chuck 126 and the wafer 106 ~~for~~ to maintain the wafer temperature at the chuck temperature. The gas is introduced to the wafer backside through an orifice 149 in the chuck 126. See Figures 1 and 2. Since the frictional forces of the impinging sputtered atoms can raise the wafer temperature above the chuck temperature, the gas ~~(referred to as backside cooling)~~ cools the wafer 106 (referred to as backside cooling) as it flows between the wafer 106 and the chuck 126. With heat transfer from the gas, the chuck may also serve as a heat sink. The backside cooling gas is withdrawn from the chamber 108 by a cryogenic pump (not shown in the Figures) operable to maintain the chamber vacuum. If the backside cooling gas is not evenly distributed across the wafer bottom surface, hot spots and attendant aluminum defects can appear in the deposited layer. It has been observed that without backside cooling the wafer temperature increases with time, approaching the plasma temperature. Such excessive wafer temperatures can cause defects in the deposited aluminum and also destroy the wafer. Thus it is known that controlling the chuck temperature during the deposition process, together with the use of backside cooling (and a clamp in the clamp-type chucks) provides control over the wafer temperature to improve the material deposition process.